REMARKS

In the Office Action, the Examiner rejected claims 15-17, 19, 22 and 44 pursuant to 35 U.S.C. §102(b) as being anticipated by Gruner (U.S. Patent No. 5,634,466). Claims 15-17, 19-20 and 22 were rejected pursuant to 35 U.S.C. §102(b) as being anticipated by Dunham et al. (U.S. Patent No. 5,762,067). Claims 15-17, 19, 22 and 48 were rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over Hossack et al. (U.S. Patent No. 5,971,925) in view of Gruner or Dunham et al. Claims 1-9 and 24-36 were allowed. Claim 23 was objected to as being allowable if rewritten in independent form. The Examiner did not indicate any basis for rejection of claim 21, but did not otherwise indicate the claim as allowable if rewritten. For the reasons discussed below, Applicants respectfully request reconsideration of the rejections of claims 15-17, 19-22, 44 and 48, including independent claims 15 and 48.

Claims 15 and 48 both require a catheter shaft with the transducer, lens and dielectric film. None of Gruner, Dunham et al. or Hossack et al. suggest these limitations.

Gruner is directed to a Transesophageal probe (title). Such probes are adapted to scan the body from within the patient's esophagus or stomach (col. 1, lines 9-11). The Figures are directed to such probes (TEE is an abbreviation for Transesophageal) (col. 2, lines 23-26). A gastroscope tube is used for such TEE probes (col. 2, lines 46-51). Since TEE probes are inserted into a relatively large opening of the body, TEE probes have room and various mechanisms for allowing rotation of the transducer array (col. 3, lines 1-21). Gruner is directed to TEE probes, so does not suggest a catheter shaft.

Similarly, Dunham et al. is directed to an endoscopic probe (title). As known in the art, an endoscopic probe is used for imaging in an accessible body cavity, such the rectum (see col. 1, lines 25-27). The Figures are directed to such endoscopic probes (col. 1, lines 47-56). Like the TEE probe of Gruner, the endoscopic probe of Dunham et al. includes various mechanisms for rotating the array given the space available due to use in body cavities (col. 6, lines 16-60). For example, see the similarity between the Figures of Gruner and Dunham et al. Dunham et al. is directed to endoscopic probes, so does not suggest a catheter shaft.

As noted by the Examiner, Hossack et al. does not even disclose a shaft.

None of the three references disclose a catheter shaft. Since Gruner and Dunham et al. are directed to larger structures used in insertable body cavities or organs, neither reference

suggests or is directed to structures for use with a catheter shaft for the ultrasound transducer.

The dependent claims 16-17, 19-23 and 44 depend from claim 15 discussed above, so are allowable for the same reasons. Further limitations of the dependent claims distinguish them from Gruner, Dunham et al. and Hossack et al.

For example, claim 17 requires a dielectric film that is a tape material. The Examiner relies on "tape-like" thin materials. However, as indicated in the specification, tape material includes adhesive. There is no suggestion in these three references of a tape material for the dielectric.

As another example, claim 21 requires the dielectric to wrap around a circumference of the transducer. All three references show the material as over a top and around part of the sides of a transducer, not around a circumference of the transducer.

New claims 49 and 50 require the dielectric film to be separate from a flexible circuit. None of the three references suggest this limitation.

CONCLUSION:

Applicants respectfully submit that all of the pending claims are in condition for allowance and seeks early allowance thereof. If for any reason, the Examiner is unable to allow the application but believes that an interview would be helpful to resolve any issues, he is respectfully requested to call the undersigned at (650) 694-5810 or Craig Summerfield at (312) 321-4726.

Respectfully submitted,

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